Passed March 1828

An Essay
on the Character and Treatment of Diseases
in the
Western part of Burlington County
New Jersey

In the Spring, Summer and Autumn of 1827.

By Joseph Warrington Jr
of that State

March 14th 1828

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The vast extent of the field of Medical Science, the numerous, diversified & interesting objects which it contains, affording ample space, both for the display of the comprehensive Genius of some, and for the slow but steady observation of others who have engaged in the study & practice of the healing art, may perhaps be considered a sufficient apology for the selection of the following brief history of the Character and treatment of diseases which occurred within the extensive sphere of the practice of my preceptor Jno. P. Spencer M.D. in the Spring Summer and Autumn of 1827 - as illustrative of the successful application of those principles taught by those professors of the practice of Medicine of the University of Pennsylvania, whose exertions to promote the interests of their science, have rendered them illustrious, and whose names will descend to posterity as monuments of industry truly worthy of imitation -

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The situation of the Village of Moorestown and its vicinity is on the western side of the State of New Jersey about 10 miles east from Philadelphia, comprising a variety of soil, from a barren sand to heavy clay highly cultivated ground, gradually rising above the shores of the Delaware river, and not including, much marshy ground, tho watered by several small streams, but is as pleasant and healthy as any of its surrounding districts, not frequently visited by peculiar Epidemic diseases, mostly sharing, however, in those of the neighbouring country -- In the autumn of 1823, 4 & 5, it participated largely in the general indisposition, particularly on the shores of Pennsauken and Rancocas Creeks, and the intermediate shore of the Delaware -- these seasons were marked in succession by the prevalence of Intermittent, Remittent and Continued fevers, pervading almost every family and in some instances extending to every member of the family - accompanied by little mortality during the first year, but became much more fatal in the last two. The Winter of 1824-5 was remarkable for the extent of an Epidemic catarh which was spread throughout

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the United States, and from which some of our patients may date the development or the aggravation of pulmonary affections -- in this section of country all ages were affected by it, tho' it proved fatal only to declining life or the tender infant, --

By the last year - 1826. the disease had diminished in violence and only a few cases of a mild form of fever appeared -

The Spring of the present year, ushered in (as is not unusually the case,) Catarrhal and Pneumonic affections, some of which were obstinate or protracted, tho' they mostly yielded to bloodletting, more or less copious and frequently repeated, according to the urgency of the symptoms, purgatives of Calomel and the neutral salts, low diet, mucilaginous beverages as decoctions of Flaxseed, Wheat-bran & Hyssop, and when the inflammatory action was sufficiently reduced anodyne diaphoretics were given to allay cough and determine to the surface; equal parts of Antimonial wine, Paregoric Elixir and sweet Spirits of Nitre in the quantity of a teaspoonful every 4 or 6 hours, for an

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adult, or about 10 grs of the Dover's powder occasionally given, mostly had the effect of relaxing the surface, promoting expectoration, and restoring health. for children the Compound Syrup of Squills, given occasionally as an Emetic, proved very efficient. During the prevalence of this disease, only one patient died, who was a venerable lady about 70 years old, subject for several years previous to a pulmonary disease —

This form of disease entirely disappeared by the 5th Month, and was succeeded by one of a Bilious character, cases of which, frequently occurred, producing in some, such irritability of the stomach as to reject every thing received into it, except opiates, and only yielded to the frequent use of small quantities of this potent drug, aided by purgative Enemata, and the application of Rubefacients or vesicatories, over the Stomach, or to the extremities — When the irritation was allayed by these means, mild Cathartics of Calomel and Jalap, or the neutral salts were exhibited, and as soon as a distinct intermission of the febrile action took place, Tonics.

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particularly the sulphate of Quinine, that excellent medicine, which the researches in Chemistry have directed of its effects and cumbrous investment, the useless and nauseous particles of Peruvian bark; for two one grain of the officinal preparation, has displayed a better effect than a drachm of the crude material which to some stomachs is very loathsome. It was prescribed in pill, or solution in mucilage of Gum Arabic, with the addition of a little Elixir of Vitriol or still less of the concentrated sulphuric acid either of which renders the milky solution, transparent. Various infusions of Cinchona, Gentiana and Columbo roots were occasionally added to moderate convalescence, which followed every attack with one exception, which was the case of an aged and extremely indigent female, whose vital spark, had by age and previous misfortune almost become extinct, though the case resembled most of the others in its symptoms, assuming after a few days a more continued form, yet it resisted, the good effect of the early use of purgatives, antimonial powders, &c

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casional draughts of the watery infusion of Gentian and lastly, the small doses of Calomel were given until its action upon the gums and breath was perceived, it did not yield to the beneficial influence of this alterative and useful remedy in the hands of a judicious Physician — We have however reason to believe that our patient was conducted by the impudence and awkwardness of an ignorant nurse who (probably from good motives enough) secreted some of the medicine and substituted rich and highly stimulating diet, which most certainly helped upon the fatal action till at length the exhausted system sunk beneath the burden, intended by the unsuspecting Caterer for its support.

About the commencement of the 7th the disease assumed a different character, being in some instances complicated of Bilious and Nervous affections. The primary symptoms generally were a degree of languor, yawning and restlessness, soreness or irritability of the muscles, skin dry and hot, dull redness of the countenance, and glassy appearance of the

eyes, the tongue in many instances covered with a thick tenacious chocolate or brown mucous accompanied by thirst and a want of a little fugitive pain in the head or alternating with a sense of lightness or languor and dull pain in the head and dull confused ideas, the bowels almost uniformly bound, the urine generally invaded the sensations slow as a rule of course. These symptoms are in most instances so gradually, that the patient could neither be aware of or remain in bed more a little for the first seven or eight days had elapsed from the commencement of the indisposition, by that time he was invariably seized on with slow and insidious march, produced much prostration of strength, sudden and involuntary twitchings of the tongue and hands, thought to a partial tremor, etc. symptoms seemed not very different from those of typhus, but on attentive examination clearly discovered that an irregular distribution of blood obstructed the labouring system in one part, while the other suffered from the absence of its accustomed stimulus in its healthy supply. Coma, stupor or great watchfulness and delirium prevailed.

of this condition of the circulation, the pulse generally at the time became small frequent and fluttering, considerable degree of heat could be felt in one part of the body, while in the other the temperature was reduced below the natural standard.

In a case, the only one of this kind which terminated fatally, the patient, an apprentice boy, with strong and robust constitution, aged about 19 years, complained of very little fatigue, but, with a very appetite, restlessness, and aversion to much motion, dryness of the tongue and mouth; yet these symptoms so slowly increased, that neither the patient nor his parents felt any alarm or thought it necessary to apply to their physician until about a fortnight after the attack, and several days following, the patient was not confined to his bed, but occasionally walked about the room, this however becoming more difficult, and at most disposition to lean his head in the midst of imaginary objects, but flush of the countenance, glaring redness of the eyes, great anxiety, respiration frequent and laborious, pulse hurried and in all, evidently marks

ing the ravages of the disease upon the brain at last he sank into a profound stupor with loud stertorous breathing, hollow vibrating, and rattling sounds in his throat, his tongue black, and dry, included with difficulty beyond his teeth, which were covered with sordes, a low muttering delirium frequently reaching after out the hands or picking at the bed clothes. The extremities frequently became cold, whilst the temperature of the breast, head and neck, was much increased, a sanguinous state was induced by blisters applied to the bare scalp. The pupils of the eyes became permanently dilated and insensible to the approach of a lighted candle. The nostrils became livid and turned inwards, and death closed the scene about four weeks from the first invasion of the disease.

In most cases of this disease convalescence was slow, and appeared to be marked by no particular crisis and the debility continued a long time, and was particularly felt, in any attempt to ascend or descend stairs. Yet the system gradually acquired its former strength, the appetite returned and the digestive functions were performed

misery. — The treatment in these cases was governed by the attendant circumstances at the time of the visit. It was here remarked that some time elapsed in most cases before advice was solicited, and seldom before the disease had taken firm hold of the system. Bleeding was seldom performed except in the early stage, or while the pulse was still active. Purgatives of Calomel, followed by oil or castor were directed at the first visits, after which as the skin was dry, diuretics of a drastic character were avoided, as tending to dry the skin. Powder or Calomel combined with Jalap were prescribed thus:

℞. Calomel: gr. ij
Pulv: Jalap
Sacch: rad. — M. ft. pulvis

given in the morning, and sometimes repeated during the night. If bowels were sluggish, or constipation threatened, the purgatives were discontinued, or some other substituted. Diaphoretics were alternated with Jacobus's powder of Nitrate of Potash, Camphor and the Tartrate of Antimony in the following manner:

℞. Nitrat: Potassæ ʒj
Aqua: Camph. ℥ xxxvi
Act: Antim: gr. v. ft. in Pulv. X. ℥ iv

of opium was ordered to be taken every two, three, or four hours
and repeated to keep up a gentle stimulation of the sys-
tem. Sometimes when the wound unavoidably had an excess
we were obliged to augment the quantity of Camphor
which in due proportion manifested more or less its calming in-
fluence. If this combination affected the stomach, produced
nausea or vomiting as sometimes happened, if the camphor
still indicated by the subsultus or sudden twitching, another preparation
of it was substituted

℞ Gum: Camph: ʒ ss
Mist: Vinos Rectif: ℥ss ft Pulv:

Gum: Mrab: ʒ ss
Sach: Alb: ℥ss

Aqua Fontanis ℥viij M ft Julep:

Of this a tablespoonful was directed to be taken every hour
or more nata. Aqueous infusions of Serpentaria were
also given at intervals, and preparations of Gentiana, Columbo
and Peruvian Bark were also exhibited as soon as any intermission of the febrile symptoms appeared. The sulphate of
quinine proved also a very useful auxiliary, it was administered at first in small quantities and at greater intervals and

increased in dose & frequency as the febrile excitement yield to the effect of the antimonial & diaphoretic action in these cases. In some of the more obstinate cases recourse was had to frequent and long continued bleeding to the lateral sinus. It was then given in doses of gtt x every two, four, or six hours (bearing by this means several evacuations, a consistent febrile nature very much to the relief of the patient,) with an opiate or the Powder at night to procure sleep and gentle perspiration - this plan was pursued, giving occasionally the Camphorated julep, warm injection and paregoric and nourishment until a slight Mercurial impression was established; in every instance when this effect was produced, convalescence followed, and although the same was adopted in the case which terminated fatally no effects of its existence could be perceived in the tissues or on the gums. Purging was not in this case continued so long as the system seemed to sink, but it was given in a moderate dose and restrained from acting on the bowels in combination with Opium, to attain this it was permitted to have a moderate quantity of cold lemonade or iced water, and in addition to the Camphorated mixture and injections, opium

tania. Wine whey and the Carbonate of Ammonia, were administered in [illegible] quantities with [illegible]

℞. Ammon. Carb. [illegible]
Gum Arab.
Mucil. Alth: aa [illegible]
Ol. Limon: [illegible]
Aq: Font. [illegible]. M. [illegible]

A table spoonful of this in a little wine was given occasionally. Blisters had previously been applied to the epigastrium, arms and legs, and a seton to the neck; lastly a blister was applied to the back of the neck; this for a time roused the sensibilities, but was soon followed by a total suspension of animation.

During, or rather subsequent to the existence of these interesting diseased cases of Uterine hæmorrhage occasionally occurred, tho' not in any of those who had been subjects of the previous disease, but mostly in females of relaxed habit, unconnected with any constitutional affection and least not preceded by any febrile symptoms, occurring in some, Abortion; and one case pregnant discharge, this took place in an Athletic woman during the last,

weeks of Gestation without her being able to ascribe it to any cause. This circumstance led to a suspicion that it arose from an implantation of the placenta over the Os Uteri and that a rupture of its adhesions was caused by the action which the Uterus exerts during the latter stages of pregnancy. By proper care, however, the discharges were prevented from being profuse, by directing her to keep in a horizontal position, cold applications, low diet & cooling drinks, and at the full period we had the satisfaction to see her safely delivered, — and upon examining the placenta, several dark spots were perceived on its uterine surface filled with coagulated blood clots indicating the presence of partial separation of this Organ from the walls of the Uterus. Could this state of the Uterus (which has been informed by any Atmospheric Agency?

In a case of a delicate married woman of a Phthisical diathesis the supposition of a serious haemorrhage from the Uterus was followed by Haemoptysis and a full development of the pulmonary disease which in a few months terminated fatally! It is probable that this premature death could have

was induced by a deterination from the Uterus to the lungs?

The method of treating these diseases, consisted in the removal of Plethora where it existed, by the use of the Lancet, strict attention to position, the hips of the patient were kept elevated, cold applications to the pelvis, by means of bladders or clothes, cool air freely admitted, acidulated drinks, low diet, or least water, and if these alone were not found effectual Pills of the Acetate of Lead and Opium were directed.

℞ Plumbi Superacetat: grs iv
Pulv: Opii gr ss
Syrup: Simplex ℥ss M. ft. Pilulæ

to be taken every two or three hours as occasion required. When the hemorrhage was attended with much pain the Camphor and Opium were sometimes given. The bowels were kept gently opened when the haemorrhage was not very copious, by mild laxatives or simple Enemata, but when there was a dangerous degree of "flooding" care was taken not to stimulate the bowels for some time. This proved successful in every instance.

The following is the history of a case so far as it came under my own observation.

L. H. aged about 27 years, a female of apparently good constitution, mother of two children, the youngest of which is rather more than 3 years old, stated that since its birth her catamenial discharge had been very irregular, and that an interval of 4 or 5 months had now elapsed, induced her to think she was pregnant, till on the 8th of the 9th Mo 1827 she was surprised by a profuse hemorrhage from the uterus accompanied by uterine pains resembling according to her own description those of labour: these alarming symptoms required immediate attention, and accordingly my preceptor was sent for, but being otherwise engaged, my esteemed friend and fellow Student John H. Stokes visited her and found her much exhausted, with the bed apparently saturated, and the floor beneath stained with blood, the room closed, and the aunt and mother administering warm teas to "ease the pains" as she declared. These were quickly prohibited, cool air admitted into the room, the hips

of the patient elevated, cold water applied to the pubes in cloths, and a pill of the acetate of lead & opium to be taken every hour until the bleeding was checked and the pain alleviated. This soon afforded her much relief, but in the evening when he again saw her, he found that violent reaction had taken place, the pulse full & active, pain in the part, thirst and other febrile symptoms. Under these circumstances he bled her freely and directed her to take half a grain of Opium every hour during the existence of the pain. I saw her on the afternoon of the following day, found her nearly free from pain, pulse a little febrile, tongue somewhat coated, skin dry and warmer than natural, and the bowels constipated. Suspecting this to arise from the Opium and Lead she had taken I directed ½℥ of Sulphate of Magnesia to be dissolved in a pint of water and a wineglassful of the solution to be taken hourly, until it operated gently; abstinence from stimulating food was also enjoined. This however proved insufficient to overcome an habitual constipation, now con-

furnace by existing circumstances and it was not until the morning of the 8th, that the bowels were moved, and with this the Uterine efforts recurred, and several coagula were thrown off; after which the pain subsided for a time, but returning at intervals with the vehemence of actual labour, made the poor woman apprehensive that an abortion must ensue, and she again applied for relief. Towards the evening of that day an examination was made per Vaginam to ascertain the condition of the Uterus. Upon introducing the finger the soft, flabby and relaxed state of the Os Uteri was easily detected and left no doubt of its unimpregnated condition, but most likely suffered the blood to exude from it and coagulate in the Vagina, its expulsion from whence had given so much anxiety to the patient. No tumour could be felt through the cavities of the abdomen. She was directed to continue the same treatment in case the bleeding should return; to take gtt XX of Laudanum to quiet the pain and on the following afternoon take ℥j of Epsom Salts. No further hemorrhage appeared, and on the

morning of the 10th the medicine having operated favourably, she was convalescent.

It may here be proper to remark that in this patient there was an instance of that habitual constipation which is more frequent among females, even those who are unrestrained by the influence of fashion, than is generally supposed; as in this & some other cases the objects of our care we were informed that, her weeks would frequently elapse without any alvine evacuation, and yet no material inconvenience would apparently arise from this state of the bowels. Whether this circumstance could have had any real agency in the above case I am unable to determine.

About the middle of the 8th Mo the Bilious remitting fever recurred, assuming the same character and requiring a similar treatment, to that of the 6. and 7 months - but in the 9 mo. when the warm midday sunns were preceded and followed by cool mornings and damp evenings tertian agues were ushered in. - they were successfully treated by purgatives of Calomel & Jalap, or

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Rhubarb followed by tonics, of the Peruvian bark in substance or infusion, the Sulphate or Extract of Quinine, and occasionally the Fowler's Mineral Solution in varied doses from three to eight or ten drops, three or four times a day, according to the age of the patient or his capacity to bear it — it was given without reference to the stage of the disease after having attended to the evacuation of the alimentary canal, and it uniformly removed the affection, by the second or third day after its administration When the Crude bark was used it was found to excite nausea, and could not be retained in the stomach long enough to produce its good effect, so that, we were obliged to give it in the form of infusion with serpentaria &c in the following prescription,

℞. Cort: Peruv: contus. ℥ß
" Aurant: " ℥ij
Rad: Serpent: Virg. ℥ij
" Columb: contus ℥j — M. Pour on these, a pint & a half of boiling water, and after standing a few hours decant a wine glass full and take one every three or four hours during the Apyrexia — Subsequent to

to this time, but little indisposition prevailed, excepting a few anomalous cases, one of the most interesting of which it may be well to notice:

A.— B— aged 16. of a vigorous constitution and plethoric habit, experienced a sudden suppression of the catamenia, complained of pain & fullness in the head, became feverish, and after a few days when my preceptor was called to visit her, the symptoms were those of ordinary bilious, fever, with an unusual determination to the brain— these symptoms became aggravated, the face was flushed with bright red alternately in each cheek, the extremities became cold while the pain & heat in the head increased the tongue black & dry in the centre whilst the edges resembled a piece of "dried beef" Coma & delirium, with stertorous breathing, tremulous motion of the extremities. The pulse during this condition of the brain, was sometimes full and frequent at other times small, tense and irritable, the pupils of the eyes became dilated & fixed and appeared to receive no impression from the strongest light, At the time my preceptor first saw her, he took from her arm a large quantity of blood, directed her to take

[illegible]

a powder of Calomel & Jalap, which on the next day was repeated, and after its free operation, gentle diaphoretics were prescribed, but the Cerebral symptoms increased and much pain was felt in the Epigastric region - to counteract which a Blister was applied to the seat of the pain - and one to each arm; bladders filled with cold water were applied to the head. The disease remaining unchecked by these measures, ten grain doses of Calomel, were ordered to be given every four hours - the head Shaved, & blistered - cold applications continued, - the Camphor Julep alternated with Carbonate of Ammonia & ~~wine~~ whey or brandy & water were administered; the Calomel operated gently and produced the discharge of considerable quantity of dark, offensive matter by which she was much relieved, and as soon as her mouth was gently affected by the mercury the unfavorable symptoms began to subside, her mind became more clear, & the pupils of the eyes which had been morbidly dilated resumed their sensibility, the dark crust of the tongue which had been separated into fissures, a spurious

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a more healthy appearance and for a day or two she appeared to be rapidly recovering — when she was attacked with violent pain in the knee joints, which continued an hour or two and then left her entirely free from any uneasiness until the afternoon following; assuming an intermittent type — by the local application of counterirritants — and tonics addressed to the system, she was relieved, and by permitting her a mild nutricious diet & keeping the bowels regulated by laxatives occasionally we had the pleasure to see our patient gradually convalescent. the menstrual secretion returned at its accustomed period, and nothing remained as the sequelae of the disease, excepting numerous small abscesses around the situations which the blisters had occupied, which, however after discharging small quantities of purulent matter gradually healed up —

Thus has been presented a distinct view of the symptoms and treatment of diseases as they occurred, and tho' in by far the greatest number of cases it was successful, still we have to regret that our exertions to rescue a few of the sufferers, were unavailing —

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